UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

ELLIOT MCGUCKEN,

Plaintiff,

-against-

SHUTTERSTOCK, INC.,

Defendant.

Case No. 1:22-cv-00905 (GHW)

DECLARATION OF STEVE HECK

STEVE HECK declares as follows:

1. I have been retained by Mitchell Silberberg & Knupp LLP, counsel for defendant Shutterstock, Inc. ("Shutterstock") as an expert. I submit this declaration in support of Shutterstock's Motion for Summary Judgment. The statements made below are true and accurate based on my own personal knowledge, including knowledge I gained as a result of my preparation to serve as Shutterstock's expert witness in this case.

A. Background of the Online Stock Photography Industry

2. Stock images are photos, illustrations, and videos created with the intention that they be used by designers or marketers in projects such as print and digital advertisements, marketing emails, web sites, brochures, and various other uses. Tens of millions of these images are created and uploaded to stock platforms every year. The vast majority will never be licensed, as it is very difficult for an individual work to stand out in the vast sea of content. Nonetheless, millions of licenses are issued through these platforms in part because prices have become very affordable and the platforms have made it easy to search, find, and download images.

3. There are three major players (platforms) in the stock photography industry: Getty Images (iStockphoto), Shutterstock, and Adobe Stock. There are many smaller competitors in the space, but the "big 3" account for the vast majority of market share.

4. While the steady and dramatic increase in the volume of quality imagery available today, due to the advancement of photographic and licensing technology, has been good for the public and has created a robust option for use of images online and offline in a way that allows the creator to get paid, the glut of high-quality content has outpaced demand. There are millions of new images uploaded to the big 3 platforms every week.

B. Contributor Onboarding Process

5. The platforms all use a very similar process to contract with new photographers and allow them to begin uploading images for sale on the respective platform. This is commonly referred to as the "ingestion process" and takes place on a contributor portal.

6. The first step is for the photographer to create an account, including agreeing to the terms of service and supplying information for receiving licensing payments. While platforms do seek to build their brands as a source for licensed imagery, platforms do not specifically "recruit" contributors, nor do they work with the contributors in any significant fashion. Rather, on all the big 3 sites and on other sites that I have encountered over the years, anyone with a valid email address and payment information can apply to be a contributor. Even so, thanks to the community, platforms' protection measures, and disincentives to infringe, the rate of even just claims of violations is extremely low.

7. The photographer is then "verified" (typically through supplying an email address and then confirming that the email address is valid), and tax status is submitted in order to receive licensing fees from licensees who access the platform.

8. After an image is uploaded on a typical platform, it goes through a very quick review process—no more than 10 to 20 seconds per image. Reviewers, who are often contractors of the platforms, must review thousands of images every day, so there is simply no time to do an in-depth analysis of the subjective quality of an image. Rather, an image is checked for technical competency (meets minimum size, in focus, well-exposed, etc.) and standards compliance (hate speech, pornographic or discriminatory material, the appearance of third-party copyrights or trademarks, use of faces without model releases, etc.).

C. Technological Process

9. Functionally, the way an image is processed when uploaded by the contributor is a mainly automated process.

10. The original image file is archived—only when someone licenses the image can they access the full-resolution image.

11. Any embedded metadata such as EXIF or IPTC[1] is automatically extracted from the image and stored in a database record that is forever associated with that unique image, prior to a cursory review by any human. The only metadata sent to reviewers is what the contributor adds to the image, such as titles and keywords. Extraction or removal of metadata is standard across many sites because any data, including malware and personally identifiable information, among others, can reside in these fields, whether the photographer or uploader knows it or not. Removal is a best practice to protect both uploaders and downstream consumers of the images.

[1] EXIF stands for exchangeable image file format and is a standard that specifies formats for images, sound, and other tags used by digital cameras and other systems that handle image and sound files recorded by digital cameras. IPTC is an acronym for International Press Telecommunications Council and is a standardized media format used by media and press agencies. It includes details such as title, description, and location.

12. A working "master copy" of a standard size is made. Many copies of the image (including small-sized, low-resolution "thumbnails") are automatically generated by the system from this master copy for purposes of helping the customer see what the image might look like in different sizes. The various copies are stored securely. At this point, images and metadata are not publicly accessible.

13. All copies except low-resolution thumbnails are automatically watermarked either with the platform's name alone or the platform's name and contributor's name, depending on size. In general, any image above 1000 pixels receives a watermark (a visual overlay), normally identifying the location where the image was available (for example, "Getty Images," "Alamy," "Shutterstock," "iStock"), which renders the image as unusable for any kind of legitimate use. Salable size assets are simply not available anywhere until a valid license has been obtained, tied to a customer, and then recorded.

14. Once images are approved for sale, which is a largely automated process, they are placed in storage areas that can be securely accessed by the web sites, applications, and APIs of the platform. There is an immense amount of effort and expense expended to keep the secure un-watermarked high-resolution versions of the images secure.

15. Once an image is marked as active, it can be seen in search results on asset detail pages, and can be licensed. Only once a license is sold is the copy delivered to the customer generated and injected with metadata that is specific to the contributor and transaction, such as the contributor name and license details. Very little, if any, of the original metadata from the uploaded image is used in the final distributed copy, as it is unregulated and could contain potentially harmful data or malicious computer code. The download of this copy is then stored and tracked by the platform for future reference.

D. Thumbnails

16. The whole industry relies extensively on traffic generated by people using the very popular Google image search to find images for projects. Therefore, thumbnail images are allowed to be indexed by the search engine to help locate images on platforms' sites, and are displayed on Google's site in search results. If a thumbnail is clicked in Google, the user is taken to the appropriate page on the stock platform where a high-resolution version can be legally licensed. Therefore, at no time is a useful version of the image in danger of being stolen. This is a standard practice and greatly benefits the photographer and the platform by exposing the work to a much broader audience (potential customers) outside the platforms' existing customer base.

E. Affiliate Relationships and APIs

17. It is common practice in the industry for stock platforms to form affiliate relationships with sites that have high traffic and a large audience of potential stock buyers. These affiliate relationships can provide millions of additional image views and click-throughs, and have no financial cost to the contributor, only the platform. Contributors are aware of and generally in favor of these relationships, as they greatly increase potential exposure to their work and increase the likelihood of licensing. Affiliates are given controlled access to a platform's image library and search technology via a secure API.

18. There are various methods in which affiliate sites use the platform content and API, but the most common model is as follows. When an affiliate user enters a search such as "business meeting," the affiliate site will run a search against its own library and simultaneously run the same search against the platforms' images. Sometimes, this search of platforms' images takes place locally on a copy of the thumbnail images and metadata tags, or the search takes place via the API using the platforms' search technology. The results from both libraries are displayed to the user.

If the user happens to click on a platform's image, the user is then taken to that image's detail page on the platform's site, where the user may complete the transaction and download the high-resolution image. If a successful transaction takes place, the affiliate is compensated by the platform according to the agreed upon contract.

19. Sometimes, affiliates may actually fulfill the transaction from their site, but the fulfillment of the high-resolution image **always** takes place via the platform's API. Hence the high resolution (salable asset) **never** resides on the affiliate site and can be deactivated (preventing download) at any time by the platform. Once an image is deactivated by the platform, it is immediately unavailable to license on either the affiliate or platform sites. Hence, although a thumbnail may still be visible on an affiliate site, the high-resolution image is not available.

20. APIs are essentially an internet-facing conduit into a company's systems. The APIs expose functionality such as search and download. The company chooses which functionality programmatically is exposed and to whom—this interface has many layers of security and control layered on top. APIs allow sites and applications to easily share data and assets over the internet in *real time*. They are now a ubiquitous form of data exchange with third parties. For example, APIs are used every time a site verifies an address with the postal service or with a bank when authorizing a credit card.

F. Addressing Allegedly Infringing Content

21. Getty Images, Shutterstock, and Adobe Stock all rely on the representations of their contributors as to copyright status. As trusted providers of licensed imagery, they cannot tolerate a scenario where infringing content is licensed by a contributor through the platform to a customer who reasonably believes that the content he or she is licensing is authorized.

22. No platform operator can be familiar with two million contributors' images, their privacy and promotion preferences, or the licensing arrangements they may have with third parties. In addition, where dozens of retouched nature images may be submitted within a week, it may be difficult for even the copyright owner herself to distinguish her images from someone else's images. In fact, the images at issue in this case are substantially indistinguishable from others' images. Attached as **Exhibit A** are examples of images, which are very similar to the plaintiff's images at issue in this case (including the one image that I understand the plaintiff identified in his takedown notice), and are currently available on Shutterstock, iStockPhoto, and Adobe and other websites.

23. Platforms must rely largely on the photographer to police unauthorized use. Platforms also rely on the contributor community, who may know certain portfolios of other contributors better than the platform does. While a very small percentage of contributors exclusively upload their content to a single platform, most contributors spread their content to three major platforms or more—not including other sites such as social media platforms. For non-exclusive imagery—which is the vast majority—it is impossible for an individual platform to determine unauthorized use because the platform is not privy to other platforms' license details. Platforms are greatly aided by DMCA notices, as the photographer is in the best position to identify unauthorized use.

24. Platforms generally only remove or disable images at the locations identified by the DMCA notice. Normally, the notices will identify the image in the marketplace itself, rather than server copies that no customer would ever find without having the original image and conducting a reverse-image search (and even then they might not find it). However, if a link to an edge or

server copy is identified and found, the platform ordinarily will remove or disable it even though the edge or server copy is not a substitute for the original and is generally unusable.

25. As part of the process which makes an image sellable on a platform, thumbnail versions of an image are pushed to edge caching services like Akamai and Amazon Cloudfront. Almost every company that offers products on the internet uses some type of service like this in order to serve millions of requests for delivery of images per day. It is the only way to guarantee reasonable delivery speeds to customers all over the world. Data can transfer no faster than the speed of light, so the further you are from the source, the longer it takes to get and render the image on your screen. For instance, data can take nearly five times longer to get from New York to Sydney as it does New York to Dallas.

26. A single search results page on a stock platform will return hundreds of thumbnails. In order to display those images within a few seconds of hitting the "search" button, no matter where the customer is in the world, platforms must utilize "edge caching." Edge caching essentially distributes copies of thumbnails to different edge caching servers all around the world, assuring that people in local regions get the images quickly because they are retrieving them from a server that is near them. If every internet user could only access one copy of a popular image from one location, a major part of the system would cease to function.

27. In general, platforms such as Shutterstock have software that will find and flush cache copies automatically or on request. However, considering that these platforms have petabytes of data, it is often impossible to track down the location of every cache copy just from the identification of a single URL. This is why it is important that with every notice, the copyright owner identifies the URL where he claims he sees a violation, as the claimant might see something

that Shutterstock's system does not. Alternatively, the claimant might not object to the platform keeping copies for recordkeeping purposes, including applying matching software.

28. Although residual copies of thumbnails may reside in various caches for days on the internet, when an image is deactivated on Shutterstock's platform, it is immediately removed from the search index and high-resolution versions are unable to be licensed or downloaded either on the site or via the API.

29. In addition, if one image is claimed in an account with dozens of images, the platform cannot know that other images in that account are unauthorized. Indeed, I am aware that platforms receive a number of claims where the photographer was confused as to ownership or the notice was subject to a "counter-notice."

30. Today's sophisticated photographer will use services such as Pixsy, Google Images, or TinEye to search for their images on the internet. These services can be quite reliable if the photographer supplies the images. However, like other "matching" software, miss-hits and false positives are not infrequent, so the photographer must be involved in reviewing the results to confirm.

31. In addition, anyone who has read about copyright protection online generally knows to avoid making high-resolution images available online in downloadable format without some protections (such as a visible watermark).

32. Occasionally, an image is licensed before the photographer finds it. In my experience, the photographer or the photographer's agent will contact the platform to discuss what to do. Photographers generally tend to understand that despite measures taken, the photographer and the platform are aligned, and the customer is not at fault either. With this view in mind, in my experience, parties generally have been able to work it out. Sending "kill notices" (in other words,

a notice to the licensee that the image is subject to a claim, and that the licensee should cease use) is very rare and normally occurs only when it is clear that the photographer objects to the continuing use by the licensee.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge.

Dated: New York, New York
January 20, 2023

Steve Heck